PRODUCT INFORMATION



Liquiritin

Item No. 30263

| CAS Registry No.: | 551-15-5 | | |
|-------------------|-------------------------------------|-----|------|
| Formal Name: | (2S)-2-[4-(β-D-glucopyranosyloxy) | | 011 |
| | phenyl]-2,3-dihydro-7-hydroxy- | | ОН |
| | 4H-1-benzopyran-4-one | | O OH |
| MF: | $C_{21}H_{22}O_9$ | | Ť Ť |
| FW: | 418.4 | HO, | o. |
| Purity: | ≥98% | | ОН |
| UV/Vis.: | λ _{max} : 218, 277, 312 nm | | |
| Supplied as: | A solid | | ОН |
| Storage: | -20°C | | |
| Stability: | ≥4 years | Ċ | |
| Item Origin: | Plant/Glycyrrhiza uralensis | | |
| | | | |

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Liquiritin is supplied as a solid. A stock solution may be made by dissolving the liquiritin in the solvent of choice, which should be purged with an inert gas. Liquiritin is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of liquiritin in these solvents is approximately 20 and 30 mg/ml, respectively.

Liquiritin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, liquiritin should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Liquiritin has a solubility of approximately 0.04 mg/ml in a 1:20 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Liquiritin is a flavonoid that has been found in *Glycyrrhiza* and has diverse biological activities.¹⁻³ It inhibits corticosterone-induced apoptosis in PC12 cells when used at concentrations of 1 and 2 mg/ml.¹ Liquiritin (120 mg/kg) reduces spinal cord levels of IL-1 β , IL-6, and TNF- α and alleviates mechanical and cold allodynia, as well as thermal hyperalgesia, in a mouse model of neuropathic pain induced by chronic constriction injury (CCI) of the sciatic nerve.² It decreases the viability of SiHa, CaSki, and HeLa cervical cancer cells and inhibits migration and invasion of SiHa cells in vitro when used at concentrations of 40, 60, and 80 μ M.³ Liquiritin (10, 20, and 30 mg/kg) reduces tumor growth in a SiHa mouse xenograft model.

References

- 1. Wu, J., Huang, F.X., Wang, J., et al. Protective effect of liquiritin on corticosterone-induced neurotoxicity in PC12 cells. Trop. J. Pharm. Res. 17(10), 2013-2017 (2018).
- 2. Zhang, M.-T., Wang, B., Jia, Y.-N., et al. Neuroprotective effect of liquiritin against neuropathic pain induced by chronic constriction injury of the sciatic nerve in mice. Biomed. Pharmacother. 95, 186-198 (2017).
- 3. He, S.-H., Liu, H.-G., Zhou, Y.-F., et al. Liquiritin (LT) exhibits suppressive effects against the growth of human cervical cancer cells through activating caspase-3 in vitro and xenograft mice in vivo. Biomed. Pharmacother. 92, 215-228 (2017).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFFTY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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